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## Mexico

### Agricultural Situation

### Summary of Mexican Government Study on the Effects of NAFTA on Mexican Agriculture

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**Report Highlights:**

This report is a summary translation of the Government of Mexico (GOM) study on the effects of NAFTA on Mexican agriculture -- a study which was mandated in 2003's National Agreement on Agriculture. The report states that there have been mixed results in Mexico's agricultural sector over the past ten years, but that these cannot be attributed solely to NAFTA given the complexity of factors involved and certain policies and conditions which predate NAFTA. The study concludes by recommending that the GOM adopt a long-term rural policy aimed at increasing the agriculture sector's share of GDP and ensuring greater efficiency, productivity and international competitiveness.

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Includes PSD Changes: No  
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**Introduction:** This report summarizes and translates into English a lengthier Spanish study done by the Government of Mexico (GOM) on the effects of NAFTA on Mexican agriculture. This study had been mandated by Mexico's National Agreement on Agriculture – an agreement signed in April 2003 by the GOM and various Mexican producer and campesino organizations after a months-long spirited public debate on the state of Mexican agriculture. This study was completed on April 4, 2004. Its Spanish title is “Evaluación Integral de los Impactos e Instrumentación del Capítulo Agropecuario del TLCAN” or “Full Evaluation of the Impacts and Implementation of the Agriculture Chapter of the North American Free Trade Agreement.” The original Spanish study was done by José Romero y Alicia Puyana, with the collaboration of R. Aceves, J. A. Ávila, F. Cortés, and C. Heredia. The summary and English translation contained herein were done by Condesa Consulting Group, SA de CV ([www.ccgamericas.com](http://www.ccgamericas.com)).

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## Executive Summary

This paper explores the North American Free Trade Agreement's (NAFTA) effects on the Mexican agriculture sector. The authors emphasize the difficulty in attributing trends solely to NAFTA, given the complexity of factors that influence the sector and the continuing role of conditions and policies that pre-date the Agreement.

The report describes the key characteristics of Mexico's agriculture sector. One striking feature is the diversity of production models, ranging from small-scale subsistence farms to large, sophisticated operations. The bulk of producers fall into the subsistence or semi-commercialized categories. The authors argue that small operations have the potential to be as productive as large-scale farms. A chronic shortage of credit and investment in rural Mexico, however, has stagnated the productive capacity of smaller operations.

Mixed results have been achieved in the Mexican agriculture sector over the past decade. Despite some setbacks and continued deficiencies, several important gains have been made. Fruit and legume exports, for example, have grown significantly thanks to greater access to the North American market. Further, the degree of concentration of agricultural exports has decreased. The country's level of "food dependence", as well as total food consumption, has increased. Lastly, productivity gains have also been achieved, although Mexico's productivity per worker is still far behind that of competing countries.

The sector has also experienced some less positive trends. On the whole, most rural workers and small producers are poorer at present than they were at the beginning of the 1990s. Increased poverty in the sector is the result of several factors. Sector exports and imports are highly sensitive to exchange rate fluctuations. A steady appreciation of the peso over the past decade has hurt exporting producers and encouraged imports. Employment in the sector has fallen, as expected under trade aperture. The rest of the economy, however, has been unable to fully absorb newly unemployed agricultural workers. Those who are still employed in the sector have suffered a decline in salary due mainly to falling prices for agricultural goods.

The Mexican government, the authors argue, has not invested sufficiently in programs to compensate subsectors harmed by open trade nor in programs to stimulate economic activity in rural areas. Although government support has increased, it remains insufficient or flawed, and, importantly, inferior to that of competing countries. Foreign governments that invest heavily in subsidies and technological advances distort international markets by producing an excess supply of agricultural goods and, consequently, artificially depress prices.

The authors recommend a long-term strategy aimed at streamlining and enhancing government programs in order to boost rural employment, agricultural productivity, and agriculture's share of the country's GDP.

## **Report Summary**

The report, "Full Evaluation of the Impacts and Implementation of the Agriculture Chapter of NAFTA", provides an overview of the Mexican agriculture sector and an analysis of its evolution since NAFTA was implemented.

## **Key Characteristics of Mexico's Agriculture Sector**

### **Dual production model**

Mexico's agriculture sector is characterized by a marked duality. The vast majority of production is attributable to a large number of highly fragmented producers engaged in semi-commercialized or subsistence farming on small plots of land (principally in the south). The remainder corresponds to a small number of large, modern operations active in trade (mainly in the center-north). Mexico's Gini coefficient is 62 percent.

### **Low productivity**

Agriculture in Mexico is the least productive sector in the country's economy. Historically, productivity in the sector has been a mere one-sixth that of the U.S. Such low productivity is largely due to the country's labor-intensive production at the subsistence and semi-commercialized levels. These producers enjoy very little access to capital and mechanization.

### **Poor financing**

Mexico's rural economy suffers from a credit shortage and a disproportionately low share of the total credit supply. As such, small and medium producers lack the resources to switch to more profitable activities and adopt new technologies that could boost productivity. The root of the problem relates to government-subsidized interest rates. Government subsidization of interest rates generates excess demand for credit, which in turn encourages financial institutions to ration available credit by raising transaction costs (such as significant collateral requirements and paperwork). The result is that small and medium producers opt for informal sources of credit, which charge elevated interest rates in exchange for reduced transaction costs.

### **Rural poverty**

Rural poverty in Mexico stems from a lack of productive resources, technology, and infrastructure. For decades rural Mexico has received relatively little investment. In 2001, the agriculture sector accounted for 5.4 percent of GDP, but received less than one percent of total investment in Mexico. Adverse natural conditions (the 1995-99 period, for example, was the second driest in the last 55 years), civil conflicts, corruption, and poorly functioning public institutions add to the problem. Lastly, misguided government policies, including taxes on exports, subsidized imports, and an overvalued currency, worsen rural poverty by keeping internal prices for agricultural goods low.

### **Long-term contraction of Mexican agriculture sector**

Mexico suffers from the "Dutch Disease", or "de-agriculturalization," the premature shrinking of the agriculture sector relative to the total economy, owing to faster rising prices for non-saleable agricultural goods than for saleable goods. The agriculture sector in Mexico represents a relatively low 4.9 percent of GDP—a proportion to which developed countries'

respective sectors did not descend until their per capita GDP had reached at least four times that of Mexico. The Dutch Disease emerged long before NAFTA was implemented, and arose mainly due to prolonged periods of currency appreciation and an import-substitution model which favored the manufacturing industry.

### **NAFTA Background**

Broadly, it was expected that NAFTA would benefit fruit and legume producers in Mexico, harm net grain and oilseed sellers, and improve the overall well being of net food consumers.

With regard to agriculture, Mexico's key objectives under NAFTA were to:

- guarantee free access for Mexican producers to the Canadian and U.S. markets
- negotiate a sufficiently long transitional period to allow the sector to adjust
- provide producers with long-term certainty and access to internationally competitive inputs
- transition toward a direct support system for certain producers (rather than broad trade protectionism)

### **Post-NAFTA Analysis of the Agriculture Sector**

#### **Multiple influences**

Numerous influences on the agricultural sector over the past decade make it difficult to isolate the impact of NAFTA. These factors include:

- The 1994-95 economic crisis in Mexico
- Depreciation and subsequent appreciation of the Mexican peso
- Insufficient investment in infrastructure
- Subsidization policies of Mexico's trade partners
- Agriculture products' international price volatility and overall downward trend
- Highly fragmented land use
- Underdeveloped and inefficient internal market
- Decreasing access to credit
- Flawed Mexican federal government support programs
- Natural phenomena

In addition, the Mexican agriculture sector had been subject to several reforms aimed at transitioning from the import substitution model to an open market for roughly a decade prior to NAFTA. The overarching goal of these reforms was to reduce poverty by lowering food prices and stimulating exports. However, reform efforts have not always been properly carried out, as some subsectors retained significant levels of protection through non-tariff barriers such as subsidies. In short, reforms that pre-date NAFTA, and which have not been always been fully or properly applied, make it difficult to identify developments in the sector owing exclusively to NAFTA.

#### **Trends in trade**

Given the range of production models—from highly fragmented subsistence farms to large, modern operations—trade aperture under NAFTA has affected Mexico's producers to differing degrees.

In retrospect, it is evident that fruit and legume producers have indeed benefited since NAFTA was implemented, while grain and oilseed producers—particularly semi-

commercialized and subsistence producers—have been negatively impacted. This is in-line with pre-NAFTA expectations, as outlined above.

Since NAFTA, the Mexican agriculture sector has achieved improved international competitiveness and a more efficient distribution of its factors of production. The degree of concentration in exported products has decreased. Agricultural exports have grown significantly, particularly in the fruit and legume category. This has helped raise Mexico's share of total agriculture imports in the United States. In 2001, Mexico represented 14 percent of agricultural imports in the U.S., compared to 12 percent in 1993. In contrast, Mexico's imports have become increasingly concentrated in grains, oilseeds, and beef.

Over the past decade, internal demand has grown faster than domestic production. The difference has been made up with imports. The agriculture sector's high sensitivity to exchange rates explains this trade deficit: a strong peso has lowered the international competitiveness of Mexican agriculture products and encouraged imports. Following the devaluation of the peso in 1995, several factors have contributed to a steadily appreciating peso, including strong levels of foreign investment, high oil prices, and substantial remittances from Mexican immigrants in the U.S. The trade deficit may also be traced, to a lesser extent, to population growth in Mexico and higher per capita animal protein consumption.

### **Trends in productivity**

Since 1993, the agriculture sector's productivity—measured in output per worker—has grown at twice the rate of that of the overall economy. Nonetheless, productivity gains achieved in competing countries have outstripped those in Mexico, and the country continues to lag significantly by this measure. For example, in 1993, Chile and Mexico produced the same value per capita. By 2000, however, Chile's productivity had doubled. The authors express concern regarding the productivity gap between Mexico and its trade partners, and assert that raising the sector's productivity is of primary importance to the entire economy.

### **Trends in employment and salary levels**

A considerably high proportion of the workforce in the Mexican economy (given the sector's relatively low share of GDP) is employed in agriculture. In the 1997-99 period, the agriculture sector's share of GDP in Mexico was 3.3 times that of the U.S., while employment in the sector compared to the total workforce was 9.1 times higher. This differential would suggest that, upon opening the sector to international competition, and in order to equate Mexico's productivity with that of the U.S., employment in the sector would have to be reduced significantly.

Over the past decade, employment in the agricultural sector has indeed fallen, from about 25 percent of the workforce in the early 1990s to 19 percent in 2001, a loss of 700,000 jobs. The low skill level of these workers makes them difficult to employ in other sectors. However, it should be stressed that many factors—both internal and external—impact the sector and changes in employment cannot be attributed to a single influence (such as NAFTA).

Lower prices for agricultural goods and the relatively small area of land devoted to fruit and legume production (which have experienced strong export growth since NAFTA) have reduced the demand for labor per unit of production—resulting in lower salaries. The decline in wages began long before NAFTA, however. Salaries in the sector, in real terms, have decreased steadily over the past two decades, reaching a mere 40 percent of their 1980 levels in 2001. The rest of the economy has lacked the dynamism to absorb excess workers, while compensatory government efforts aimed at stimulating employment in rural areas and improving infrastructure have been insufficient.

The loss of employment in rural areas coincides with increased emigration to the U.S. and urban centers in Mexico. Again, however, experts do not see a clear link between NAFTA and increased levels of emigration. Indeed, emigration to the U.S. began to accelerate before NAFTA was implemented.

### **Food dependence**

Mexico's level of "food dependence" (as per the FAO measure of food product imports as a percentage of total country exports) has decreased since NAFTA was implemented. This trend is largely due to the strong performance of Mexican manufactured good exports over the last decade. Moreover, the total level of food consumption in the country has increased over the past decade, after contracting in the 1980-90 period.

## **Challenges to Government**

### **Government support in Mexico**

Studies realized prior to NAFTA's implementation suggested that targeted public spending would be necessary to compensate certain subsectors and promote market competitiveness. Compensatory measures aimed at less fortunate groups in the sector were, in effect, bolstered (total government support for farmers in Mexico has roughly quadrupled since the late 1980s). However, the authors explain that support programs were underfunded relative to competing countries' levels of government assistance. Mexico's support of farmers is still relatively low at less than one-third that of the U.S.—due in large part to the sheer number of agricultural producers in Mexico. The effectiveness of Mexican government programs, therefore, has been lower than originally hoped.

One such project is PROCAMPO, a direct compensatory payment program to producers of certain agriculture goods. The authors report that only a portion of needy producers received aid from PROCAMPO, as the program tended to favor landowners with larger properties.

### **Role of foreign governments**

World prices for agricultural products have declined steadily since 1997 due largely to government subsidies in developed countries (principally the U.S. and E.U.), yield-boosting technological advances, and the emergence of new exporters such as Argentina and Brazil.

Government subsidies, in particular, distort international markets by:

- isolating home producers from market signals (prices),
- inducing excessive production and depressed prices,
- creating uncertainty due to the discretionary character of agencies, such as the USDA.

However, prices for agricultural goods in Mexico had been falling since the early 1980s. Hence, the authors point out that it is questionable whether depressed prices in Mexico over the last decade are solely a result of NAFTA, or whether they reflect a longer-term trend that began many years before the Agreement's implementation.

## **Study's Recommendations**

Mexico requires a rural policy with a long-term horizon, aimed at increasing agriculture's share of GDP while ensuring greater efficiency, productivity, and international competitiveness. Rural policy should be more comprehensive in scope and make greater

Specifically, Mexico should work toward the following:

- Increasing the level of investment in the sector
- Providing individualized support to targeted producers based on specific needs
- Enhancing and better coordinating government support programs in order to avoid overlapping benefits
- Developing a long-term support program with stable financing that provides certainty and stability to all major economic agents
- Fully applying those defense mechanisms allowed for agriculture under NAFTA

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